REMARKS

Response to Restriction Requirement

The Examiner indicated that restriction to one of the following inventions is required under 35 U.S.C. 121:

- Claims 1-16 and 33, drawn to an electrolytic method, classified in class 205, subclass 220;
- II. Claims 17-32, drawn to a solution, classified in class 106, subclass 1.18.

Applicants elect the claims of Group I, with traverse. Thus, the claims that are readable on the elected species and variations for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable include: claims 1-16 and 33.

Also, upon the allowance of a generic claim. Applicants wish to re-open consideration of claims to additional species and variations which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141.

In the Claims

Claims 1, 3, 9, 10, 12, 13 and 33 have been amended. Claims 8, 11 and 14 have been canceled. New dependent claim 34 has been added. No new matter has been added to the application by virtue of the present amendment. Claims 17-32 are withdrawn from consideration.

DE9-2000-0069-US1 09/682,377

Page 5 of 9

Accordingly, claims 1-7, 9, 10, 12, 13, 15, 16, 33 and 34 are pending in the subject application. It is respectfully requested that the pending claims 1-7, 9, 10, 12, 13, 15, 16, 33 and 34 be reconsidered and passed to issuance in view of this response.

Claim Rejections – 35 U.S.C. 102 (e)

The Examiner has rejected claims 1-4, 6-7, 14-16 and 33 under 35 U.S.C. 102(e) as being anticipated by Chen (U.S. Patent No. 6,197,181); and, rejected claims 1-4, 6, 8-10, 12-16 and 33 under 35 U.S.C. 102(e) as being anticipated by Matsunaga et al. (U.S. Patent No. 6,118,280).

Applicants have amended claim 1 to recite the limitations of "... introducing a second solution comprising a stabilizing agent, the stabilizing agent comprising an acid which keeps metal or alloy ions in the plating solution". Likewise, Applicants have amended claim 33 to recite the limitations of "... introducing a second solution comprising a stabilizing agent onto the substrate surface, the stabilizing agent comprising an acid in order to keep metal alloy ions in the plating solution."

Claims 2-7, 9, 10, 12, 13, 15, 16 and 34 are dependent upon claim 1, as amended. Support for Applicants' amendment to claims 1 and 33 can be found, for example, in paragraphs [0054-0060]. Support for Applicants' new dependent claim 34 can be found, for example, in paragraph [0061]. Applicants' invention discloses, for example, a second solution different from the plating solution, which is introduced into the plating solution to keep metal or alloy ions in the plating solution. By keeping metal or alloy ions in the plating solution, the present invention prevents the formation of precipitated salts on the surface of the substrate. Applicants invention provides a method whereby the second solution is not relied on for the plating process, rather the second solution can be optimized to prevent formation of precipitated salts on the substrate surface.

DE9-2000-0069-US1 09/682.377

Page 6 of 9

Chen does not anticipate or suggest Applicants' independent claims 1 and 33, as amended. Chen is silent on the use of a <u>second solution</u> comprising a complexing agent where the complexing agent includes an <u>acid</u>. Chen relies on the complexing agent to perform the electroplating process (column 6, lines 20-48). Chen teaches a plating solution which includes a complexing agent as a component of the plating solution for enhancing the voltage potential at which the copper is plated. Chen does not disclose a second solution distinct from the plating solution as claimed by the Applicants.

Similarly, Matsunaga et al. do not anticipate or suggest Applicants' claims 1 and 33, as amended. Matsunaga et al. are silent on the use of a second solution including a stabilizing agent. Matsunaga et al. disclose only a plating solution (i.e. electrolyte solution) including an acid for dissolving the metal component to enable the electroplating process (column 7, lines 62-65). Matsunaga et al. do not disclose a second solution distinct from the plating solution as claimed by the Applicants.

Therefore, Applicants respectfully submit that the rejection under 35 U.S.C. 102(e) has been overcome.

Claim Rejections - 35 U.S.C. 103 (a)

The Examiner has rejected claims 5 and 11 under 35 U.S.C. 103(a) as being unpatentable over Matsunaga et al. (U.S. Patent No. 6,118,280) as applied to claims 1 and 8 above.

Claim 11 has been canceled. Claim 5 is dependent upon independent claim 1, as amended. As discussed above, Applicants believe that Matsunaga et al. do not teach or suggest Applicants' claim 1, as amended.

DE9-2000-0069-USI 09/682,377

Therefore, Applicants respectfully submit that the rejection under 35 U.S.C. 103(a) has been overcome.

DE9-2000-0069-US1 09/682,377

CONCLUSION

In light of the foregoing amendments and remarks, all of the claims now presented are believed to be in condition for allowance, and Applicants respectfully request that the outstanding rejections be withdrawn and this application be passed to issue at an early date.

The Examiner is urged to call the undersigned at the number listed below if, in the Examiner's opinion, such a phone conference would aid in furthering the prosecution of this application. Applicants request a one month extension of time by virtue of the present response. Please charge Applicants' deposit account, 09-0456, a fee of \$110 for a one month extension of time which is due by virtue of this response, and for any additional fee that the PTO determines is due.

Respectfully Submitted,

For: Barber et al..

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DE9-2000-0069-US1 09/682,377

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Page 9 of 9